

# BOTHALIA

VOLUME 34

INDEX



SOUTH AFRICAN  
national  
biodiversity  
institute

S A N B I

ISSN 0006 8241

2004



# BOTHALIA

A JOURNAL OF BOTANICAL RESEARCH

**Volume 34**

Scientific Editor: G. Germishuizen  
Technical Editor: B.A. Momberg



**SOUTH AFRICAN**  
national  
biodiversity  
institute  

---

S A N B I

2 Cussonia Avenue, Brummeria, Pretoria / Private Bag X101, Pretoria 0001

ISSN 0006 8241

2004



AFRICA



Digitized by the Internet Archive  
in 2025

# CONTENTS

	Page	Date
No. 1	1–76	May 2004
No. 2	77–184	Oct. 2004
CESSELET, P., VAN WYK, A.E. & SMITH, G.F. A new tribe and adjustments to infrafamilial classification (Mesembryanthemaceae) . . . . .	47	
EDWARDS, T.J. Type specimens of <i>Selago</i> , <i>Jamesbrittenia</i> and <i>Sutera</i> at Natal University Herbarium (NU) (Scrophulariaceae) . . . . .	27	
GOLDBLATT, P. & MANNING, J.C. Taxonomic notes and new species of the southern African genus <i>Babiana</i> (Iridaceae: Crocoideae) . . . . .	87	
HERMAN, P.P.J. & KOEKEMOER, M. <i>Dicoma picta</i> , the correct name for <i>Cypselodontia eckloniana</i> (Asteraceae) . . . . .	106	
HURTER, P.J.H. & VAN WYK, A.E. A new species of <i>Acacia</i> (Mimosoideae) from Mpumalanga, South Africa (Fabaceae) . . . . .	42	
HURTER, P.J.H. & VAN WYK, A.E. A new species of <i>Acacia</i> (Mimosoideae) from the province of Limpopo, South Africa (Fabaceae) . . . . .	109	
MANNING, J.C. <i>Ornithogalum laikapiense</i> , a synonym of <i>Drimia macrocarpa</i> (Hyacinthaceae) . . . . .	112	
MANNING, J.C. & GOLDBLATT, P. Two new species of <i>Romulea</i> (Iridaceae: Crocoideae) from the western Karoo, Northern Cape and notes on infrageneric classification and range extensions . . . . .	17	
MANNING, J.C. & GOLDBLATT, P. A new species of <i>Thereianthus</i> (Crocoideae) from Western Cape, South Africa, nomenclatural notes and a key to the genus (Iridaceae) . . . . .	103	
MOMBERG, B. Compiler. National Botanical Institute South Africa: administration and research staff 31 March 2004, publications 1 April 2003–31 March 2004 . . . . .	155	
NELSON, E.C. & OLIVER, E.G.H. Cape heaths in European gardens: the early history of South African <i>Erica</i> species in cultivation, their deliberate hybridization and the orthographic bedlam . . . . .	127	
OLIVER, E.G.H. Nomenclatural changes in <i>Erica</i> (Ericaceae) . . . . .	38	
OLIVER, E.G.H. & OLIVER, I.M. Two new species of <i>Erica</i> (Ericaceae); one from Western Cape and one from KwaZulu-Natal, South Africa . . . . .	11	
PEROLD, S.M. Studies in the genus <i>Riccia</i> (Marchantiales) from southern Africa. 26. A new species in section <i>Pilifer</i> , <i>Riccia radiata</i> , is described . . . . .	23	
PEROLD, S.M. Studies in the genus <i>Riccia</i> (Marchantiales) from southern Africa. 27. <i>Riccia lanceolata</i> and <i>R. radicata</i> now also locally reported . . . . .	97	
ROUX, J.P. <i>Dryopteris filipaleata</i> (Pteropsida: Dryopteridaceae), a new species from tropical East Africa (Pteridophyta) . . . . .	27	
ROUX, J.P. <i>Dryopteris gorgonea</i> (Pteropsida: Dryopteridaceae), a new species from the Cape Verde Islands (Pteridophyta) . . . . .	32	
ROUX, J.P. A new combination in <i>Lastreopsis</i> (Tectariaceae) from Madagascar (Pteridophyta) . . . . .	108	
SIEBEN, E.J.J., BOUCHER, C. & MUCINA, L. Vegetation of high-altitude fens and restio marshlands of the Hottentots Holland Mountains, Western Cape, South Africa . . . . .	141	
SIEBERT, S.J., FISH, L., UIRAS, M.M. & IZIDINE, S.A. Grass assemblages and diversity of conservation areas on the coastal plain south of Maputo Bay, Mozambique . . . . .	61	
SMITH, G.F., VAN WYK, A.E., STEYN, E.M.A. & RETIEF, E. A first record of <i>Echium simplex</i> in South Africa (Boraginaceae) . . . . .	44	
STEYN, E.M.A., SMITH, G.F. & VAN WYK, A.E. Functional and taxonomic significance of seed structure in <i>Salix mucronata</i> (Salicaceae) . . . . .	53	
TILNEY, P.M. & VAN WYK, A.E. Extrafloral nectaries in Combretaceae: morphology, anatomy and taxonomic significance . . . . .	115	
TURNER, R.C. & OLIVER, E.G.H. A new species of indehiscent-fruited <i>Erica</i> from the central Kouebokkeweld, Western Cape, South Africa (Ericaceae) . . . . .	39	
VAN JAARSVELD, E.J., NORDENSTAM, B. & VAN WYK, A.E. <i>Adromischus schuldianus</i> subsp. <i>brandbergensis</i> , a new subspecies and a checklist of the succulent flora of the Brandberg, Namibia (Crassulaceae) . . . . .	35	
VAN JAARSVELD, E.J. & VAN WYK, A.E. <i>Plectranthus mzimvubuensis</i> , a new species from Eastern Cape, South Africa (Lamiaceae) . . . . .	30	
VORSTER, P. Obituary: Johannes Jacobus Adriaan van der Walt (1938–2003) . . . . .	73	
VORSTER, P. Typification of <i>Encephalartos</i> (Zamiaceae) . . . . .	112	
WHITEHOUSE, C.M. The genus <i>Cliffortia</i> (Rosaceae) in KwaZulu-Natal . . . . .	1	
WHITEHOUSE, C.M. New species in the section <i>Multinerviae</i> of <i>Cliffortia</i> (Rosaceae) . . . . .	77	





## INDEX

## Acacia

*ebutsiniorum* P.J.H.Hurter, 42

*sekhukhuniensis* P.J.H.Hurter, 109

*Adromischus schuldianus* (Poelln.) Poelln. subsp. *brandbergensis* B.Nord. & Van Jaarsv., 35

## Africa

East, 27

South, 11, 17, 30, 39, 42, 44, 103, 109, 141

southern, 23, 87, 97

anatomy, 53, 115

anemochory, 53

*Antholyza hypogaea* (Burch.) Klatt, 92

area of endemism, 1

Asteraceae, 106

*Babiana* Ker Gawl., 87

*bainesii* Baker, 92

*cuneata* J.C.Manning & Goldblatt, 89

*cuneifolia* Baker, 88

*disticha* Ker Gawl., 95

*erectifolia* G.J.Lewis, 94

*falcata* G.J.Lewis, 92

*flabellifolia* Harv. ex Klatt, 88

*flabellifolia* sensu G.J.Lewis, 90

*flavida* G.J.Lewis, 92

*fragrans* (Jacq.) Goldblatt & J.C.Manning, 95

*hypogaea* Burch., 92

[*hypogaea*] var. *ensifolia* G.J.Lewis, 93

[*hypogaea*] var. *longituba* G.J.Lewis, 93

*longiflora* Goldblatt & J.C.Manning, 94

*plicata* Ker Gawl., 95

*praemorsa* Goldblatt & J.C.Manning, 90

*regia* (G.J.Lewis) Goldblatt & J.C.Manning, 94

*schlechteri* Baker, 92

*stricta* (Aiton) Ker Gawl., 94

var. *erectifolia* (G.J.Lewis) G.J.Lewis, 93, 94

var. *grandiflora* G.J.Lewis, 93, 94

var. *regia* G.J.Lewis, 93, 94

var. *stricta*, 93, 94

*truncata* G.J.Lewis, 88

biogeography, 87

Boraginaceae, 44

botanical history, 127

Boucher, C., 141

Brandberg, Namibia, 35

canonical correspondence analysis, 141

Cape heaths, 127

Cape Verde Islands, 32

Cape Wetlands Fynbos, 141

Cape

Eastern, 30

Northern, 17

Western, 11, 39, 103, 141

checklist, 37, 39

grasses, 70

Chesselet, P., Van Wyk, A.E. & Smith, G.F. A new tribe and adjustments to infrafamilial classification (Mesembryanthemaceae), 47

*Cliffortia* L., 1, 77

*acanthophylla* C.M.Whitehouse, 79

*browniana* auctt. non Burt Davy, 3, 4

*browniana* Burt Davy, 3

*ceresana* C.M.Whitehouse, 80

*denticulata* (Weim.) C.M.Whitehouse, 81

*dracomontana* C.M.Whitehouse, 3

*dregeana* auct. non C.Presl, 79, 84

*dregeana* C.Presl var. *meyeriana* auct. non (C.Presl) Weim., 79

*erectisepala* Weim., 8

*filicauloides* Weim., 5

*galpinii* auct. non N.E.Br., 6

*galpinii* N.E.Br., 8

*grandifolia* Eckl. & Zeyh.

var. *denticulata* Weim., 81

var. *recurvata* Weim., 82

*ilicifolia* auct. non L.: Weim., 80

*ilicifolia* L.

var. *reniformis* Weim., 77

var. *schlechteri* Weim., 78

*intermedia* auct. non Eckl. & Zeyh., 81

*juniperina* auct. non L.f., 6

*linearifolia* Eckl. & Zeyh., 5

*nitidula* (Engl.) R.E.Fr. & T.C.E.Fr. subsp. *pilosa* Weim., 5

*oligodonta* C.M.Whitehouse, 82

*paucistaminea* Weim., 6

var. *australis* C.M.Whitehouse, 7

var. *paucistaminea*, 7

*prionota* C.M.Whitehouse, 83

*ramosissima* Schltr., 8

*recurvata* (Weim.) C.M.Whitehouse, 82

*reniformis* (Weim.) C.M.Whitehouse, 77

*repens* Schltr., 8

*scandens* C.M.Whitehouse, 84

*schlechteri* (Weim.) C.M.Whitehouse, 78

*spathulata* auctt. non Weim., 3

*spathulata* Weim., 4

comb. nov., 77, 78, 81, 82, 94, 95, 108

Combretaceae, 115

correct name, 106

Crassulaceae, 35

Crocoideae, subfamily, Iridaceae, 87, 103

*Cypselodontia eckloniana* DC., 107

Dicoma

*picta* (Thunb.) Druce, 107

*radiata* Less., 108

distribution records, 21

dorsal epithelium, 23

Drakensberg, 1

*Drimia macrocarpa* Stedje, 112

Drosanthemaeae Chesselet, Gideon F.Sm. & A.E.van Wyk, tribe, Mesembryanthemaceae, 49

Dryopteridaceae (Pteropsida), 27, 32

Dryopteris

*filipaleata* J.P.Roux, 28

*gorgonea* J.P.Roux, 33



- Dryopteris* (cont.)  
*perrieriana* C.Ch., 108  
 dunes, 61  
 Eastern Cape, 30  
*Echium simplex* DC., 44, 46  
 ecology, 61  
 Edwards, T.J. Type specimens of *Selago*, *Jamesbrittenia* and *Sutera* at Natal University Herbarium (NU) (Scrophulariaceae), 27  
*Encephalartos* *Lehm.*, 112  
 Ericaceae, 11, 38, 39  
*Erica* L., 11  
   *jananthus* E.G.H.Oliv. & I.M.Oliv., 11  
   *pilaarkopensis* H.A.Baker, 38  
   *pillarkopensis* H.A.Baker, 38  
   *psittacina* E.G.H.Oliv. & I.M.Oliv., 13  
   *salicina* E.G.H.Oliv., 38  
   *tragomontana* R.C.Turner, 39  
 extrafloral nectary, 115  
 Fabaceae, 42, 109  
 Fish, L., 61  
 Flacourtiaceae, 53  
 forest, 61  
 garden history, 127  
*Gladiolus*  
   *fragrans* Jacq., 95  
   *spicatus* L., 105  
   *strictus* Aiton, 94  
 Goldblatt, P., 17, 103  
 Goldblatt, P. & Manning, J.C. Taxonomic notes and new species of the southern African genus *Babiana* (Iridaceae: Crocoideae), 87  
 grasses, 61  
 grassland, 61  
 guide for authors to *Bothalia*, 175  
 Herman, P.P.J. & Koekemoer, M. *Dicoma picta*, the correct name for *Cypselodontia eckloniana* (Asteraceae), 106  
 hilar aril, 53  
 Hottentots Holland Mountains, Western Cape, 141  
 Hurter, P.J.H. & Van Wyk, A.E. A new species of *Acacia* (Mimosoideae) from Mpumalanga, South Africa (Fabaceae), 42  
 Hurter, P.J.H. & Van Wyk, A.E. A new species of *Acacia* (Mimosoideae) from the province of Limpopo, South Africa (Fabaceae), 109  
 Hyacinthaceae, 112  
 hybrids, 127  
 hydrochory, 53  
 infrafamilial classification, 47  
 infrageneric classification, 17  
 Iridaceae, 17, 87, 103  
 Izidine, S.A., 61  
*Jamesbrittenia multisecta* Hilliard, 27  
 key  
   *Cliffortia* spp., 2  
   *Thereianthus* spp., 106  
 Koekemoer, M., 106  
 Kouebokkeveld, Western Cape, 39  
 KwaZulu-Natal, 1, 11  
*Laguncularia* C.F.Gaertn., 115  
 Lamiaceae, 30  
*Lastreopsis perrieriana* (C.Ch.) J.P.Roux, 108  
*Leyssera picta* Thunb., 107  
 Limpopo, 109  
*Lumnitzera* Willd., 115  
 Madagascar, 108  
 Manning, J.C., 87  
 Manning, J.C. *Ornithogalum laikpiense*, a synonym of *Drimia macrocarpa* (Hyacinthaceae), 112  
 Manning, J.C. & Goldblatt, P. A new species of *Thereianthus* (Crocoideae) from Western Cape, South Africa, nomenclatural notes and a key to the genus (Iridaceae), 103  
 Manning, J.C. & Goldblatt, P. Two new species of *Romulea* (Iridaceae: Crocoideae) from the western Karoo, Northern Cape and notes on infrageneric classification and range extensions, 17  
 Manuleae, tribe, Scrophulariaceae, 27  
 Maputaland, 61  
 Marchantiales, 23, 97  
*Meiostemon* *Exell & Stace*, 115  
 Mesembryanthemaceae, 47  
 Mimosoideae, subfamily, Fabaceae, 42, 109  
 Momberg, B.A. Compiler: National Botanical Institute, South Africa: administration and research staff 31 March 2004, publications 1 April 2003–31 March 2004, 155  
 morphology, 115  
 Mozambique, 61  
 Mpumalanga, 42  
 Mucina, L., 141  
*Multinervia* DC., section, Rosaceae, 77  
 Namaqualand, 21  
 Namibia, 35  
 Nelson, E.C. & Oliver, E.G.H. Cape heaths in European gardens: the early history of South African *Erica* species in cultivation, their deliberate hybridization and the orthographic bedlam, 127  
 new  
   combinations, 77, 78, 81, 82, 94, 95, 108  
   name, 38  
   record, 44  
   species, 1, 3, 11, 13, 17, 19, 23, 27, 28, 30, 32, 33, 39, 42, 44, 77, 79, 80, 82, 83, 84, 89, 90, 94, 103, 109  
   status, 77, 78, 81, 82, 94  
   subspecies, 35  
   tribe, 47  
   variety, 7  
 nomenclatural changes, 38  
 nomenclature, 127  
 nom. nov., 38  
 Nordenstam, B., 35  
 Northern Cape, 17  
 obituary, 73  
 Oliver, E.G.H., 39, 127  
 Oliver, E.G.H. Nomenclatural changes in *Erica* (Ericaceae), 38  
 Oliver, E.G.H. & Oliver, I.M. Two new species of *Erica* (Ericaceae); one from Western Cape and one from



- KwaZulu-Natal, South Africa, 11  
 Oliver, I.M., 11  
*Ornithogalum laikipiense* L.E.Newton, 112  
 Perold, S.M. Studies in the genus *Riccia* (Marchantiales) from southern Africa. 26. A new species in section *Pilifer*, *Riccia radiata*, is described, 23  
 Perold, S.M. Studies in the genus *Riccia* (Marchantiales) from southern Africa. 27. *Riccia lanceolata* and *R. radicata* now also locally reported, 97  
 phytosociology, 141  
 Pilifer *O.H.Volk*, section, Ricciaceae, 23  
 plant communities, 141  
*Plectranthus mzimvubuensis* Van Jaarsv., 30  
 plumed seed, 53  
 Poaceae, 61  
*Pteleopsis Engl.*, 115  
 Pteridophyta, 27, 32, 108  
 Pteropsida: Dryopteridaceae, 27, 32  
 publications by the staff, 164  
*Quisqualis L.*, 115  
 range extensions, 17, 21  
 Retief, E., 44  
 rheophyte, 53  
*Riccia*  
   *lanceolata Steph.*, 97  
   *radiata Perold*, 23  
   *radicata Pearson*, 98  
*Romulea*  
   *collina J.C.Manning & Goldblatt*, 17  
   *eburnea J.C.Manning & Goldblatt*, 19  
   *maculata Manning & Goldblatt*, 21  
   *multisulcata M.P.de Vos*, 21  
   *tabularis Eckl. ex Bég*, 21  
 Rosaceae, 1, 77  
 Roux, J.P. *Dryopteris filipaleata* (Pteropsida: Dryopteridaceae), a new species from tropical East Africa (Pteridophyta), 27  
 Roux, J.P. *Dryopteris gorgonea* (Pteropsida: Dryopteridaceae), a new species from the Cape Verde Islands (Pteridophyta), 32  
 Roux, J.P. A new combination in *Lastreopsis* (Tectariaceae) from Madagascar (Pteridophyta), 108  
*Ruschieae Schwantes*, tribe, Mesembryanthemaceae, 49  
 Salicaceae, 53  
*Salix mucronata Thunb.*, 53  
 Scrophulariaceae, 27  
 section  
   *Multinerviae DC.*, 77  
   *Pilifer O.H.Volk*, 23  
 seed adaptations, 53  
 Selagineae, tribe, Scrophulariaceae, 27  
*Selago*  
   *dolosa Hilliard*, 27  
   *florifera Hilliard*, 27  
   *griquana Hilliard*, 27  
   *hyssopifolia E.Mey.* subsp. *retrotricha Hilliard*, 27  
   *inconstans Hilliard*, 27  
   *retropilosa Hilliard*, 27  
   *tarachodes Hilliard*, 27  
   *variicalyx Hilliard*, 27  
   *zuluensis Hilliard*, 27  
 Sieben, E.J.J., Boucher, C. & Mucina, L. Vegetation of high-altitude fens and restio marshlands of the Hottentots Holland Mountains, Western Cape, South Africa, 141  
 Siebert, S.J., Fish, L., Uiras, M.M. & Izidine, S.A. Grass assemblages and diversity of conservation areas on the coastal plain south of Maputo Bay, Mozambique, 61  
 Smith, G.F., 47, 53  
 Smith, G.F., Van Wyk, A.E., Steyn, E.M.A. & Retief, E. A first record of *Echium simplex* in South Africa (Boraginaceae), 44  
 South Africa, 11, 17, 30, 39, 42, 44, 103, 109, 141  
 southern Africa, 23, 87  
 species complexes, 77  
 sp. nov., 1, 3, 11, 13, 17, 19, 23, 28, 30, 33, 39, 42, 44, 77, 79, 80, 82, 83, 84, 89, 90, 94, 103, 109  
 sporangia, 23, 97  
 spores, 23, 97  
 staff list, 155  
 stat. nov., 77, 78, 81, 82, 94  
 Steyn, E.M.A., 44  
 Steyn, E.M.A., Smith, G.F. & Van Wyk, A.E. Functional and taxonomic significance of seed structure in *Salix mucronata* (Salicaceae), 53  
 subfamily  
   Crocoideae, Iridaceae, 17, 87, 103  
   Mimosoideae, Fabaceae, 42, 109  
 subsp. nov., 35  
 succulent flora of the Brandberg, 35, 37  
*Sutera glandulifera Hilliard*, 27  
 syntaxonomy, 141  
 systematics, 87  
 taxonomy, 1, 11, 17, 23, 30, 35, 38, 39, 42, 44, 47, 53, 77, 87, 97, 103, 106, 108, 109, 112  
 Tectariaceae, 108  
*Terminalia L.*, 115  
 thallus, 23, 97  
*Thereianthus*  
   *lapeyrousioides* var. *elatior* G.J.Lewis, 106  
   *minutus (Klatt) G.J.Lewis*, 105  
   *montanus J.C.Manning & Goldblatt*, 103  
   *spicatus (L.) G.J.Lewis*, 105  
   var. *linearifolius* G.J.Lewis, 105  
 Tilney, P.M. & Van Wyk, A.E. Extrafloral nectaries in Combretaceae: morphology, anatomy and taxonomic significance, 115  
 tribe  
   Drosanthemeae, Mesembryanthemaceae, 49  
   Manuleae, Scrophulariaceae, 27  
   Ruschieae, Mesembryanthemaceae, 49  
   Selagineae, Scrophulariaceae, 27  
 trib. nov., 49  
 tropical East Africa, 27  
 Turner, R.C. & Oliver, E.G.H. A new species of indehiscent-fruited *Erica* from the central Kouebokkerveld, Western Cape, South Africa (Ericaceae), 39  
 type specimens, 27  
 typification, 112

- Uiras, M.M., 61
- Van der Walt, J.J.A. (1938–2003), 73
- Van Jaarsveld, E.J. & Van Wyk, A.E. *Plectranthus mzimvubuensis*, a new species from Eastern Cape, South Africa (Lamiaceae), 30
- Van Jaarsveld, E.J., Nordenstam, B. & Van Wyk, A.E. *Adromischus schultianus* subsp. *brandbergensis*, a new subspecies and a checklist of the succulent flora of the Brandberg, Namibia (Crassulaceae), 35
- Van Wyk, A.E., 30, 35, 42, 44, 47, 53, 109, 115
- var. nov., 7
- Vorster, P. Obituary: Johannes Jacobus Adriaan Van der Walt (1938–2003), 73
- Vorster, P. Typification of *Encephalartos* (Zamiaceae), 112
- Western Cape, 11, 39, 103, 141
- Whitehouse, C.M. The genus *Cliffortia* (Rosaceae) in Kwa-Zulu-Natal, 1
- Whitehouse, C.M. New species in the section *Multinerviae* of *Cliffortia* (Rosaceae), 77
- woodland, 61
- Zamiaceae, 112





